

REMARKS

This paper is in response to the Final Office Action mailed June 23, 2010. By this paper, claim 1 is amended and claim 64 is added. Therefore, upon entry of this paper, claims 1, 4, 5, 10, 16, 18-21, 24, 25, 27, 29, 34, 35, 38, 42, 43, and 64 are pending in this application.

Response to Rejection of Claim 1

In the Final Office Action, claim 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over Dunmire (U.S. Patent 4,519,098). In response, Applicants respectfully submit that the cited reference fails to teach or disclose the method of making garment material as required by claim 1.

Dunmire discloses a method for producing protective work gloves and other wearing apparel having a variety of different protective and surface characteristics. The method includes developing a work glove including its liner in a series of steps applied sequentially to a single form moving through a production line while eliminating the need for a separate operation for producing fabric liners including cutting, sewing, and the manual loading of each individual liner on a form for subsequent dipping and coating operations.

On the other hand, Applicants' claim 1 is directed to a method in which a coagulant is applied to a substrate and then foamed polymeric material is applied in a layer over the substrate. The coagulant acts on the polymeric layer to coagulate it outwards from the inner, substrate-side of the layer. After a controlled period of time, the polymeric layer will comprise an inner, coagulated layer and an outer, uncoagulated layer.

The method specifically does not apply a coagulant to the outer side of the polymeric layer. That would coagulate the layer inwards from the outer side of the layer and, importantly, a film skin would form over the outer surface of the layer. Instead, the uncoagulated layer is removed so that no skin forms on its outer surface. That provides a more porous and breathable layer, which is an advantage of Applicants' invention.

Claim 1 has been amended to clarify that the *uncoagulated layer* is removed before a film skin forms on the layer. This is not taught in any of the cited references.

The Examiner suggested that "blowing out" webs formed between fingers is equivalent to

removing “the uncoagulated foam” (which has been replaced by the wording “the uncoagulated layer”). Applicants respectfully disagree.

As is known to those skilled in the art, the blowing out process referred to in Dunmire does not remove *any* uncoagulated polymeric material. It simply blows the uncoagulated polymeric material bridging two fingers onto one or other of those fingers. Therefore, rather than removing uncoagulated material to expose the coagulated material as in Applicants’ invention, it will tend to spread the uncoagulated material onto other areas of material which may or may not be coagulated. But even if the “webs” of material were removed, clearly that blowing process would not remove all of the uncoagulated material – it would not be removal of a layer, and would not expose the porous breathable coagulated layer.

According to its everyday usage, and the understanding of a skilled person on reading the specification of this application, a “layer” is something that overlays something else. In claim 1, the polymeric material, after it has been applied to the substrate, overlays the substrate and is therefore a layer. The layer of polymeric material comprises, after a controlled period, a coagulated layer that overlays the substrate and an uncoagulated layer that overlays the coagulated layer. The “webs”, which are films of polymeric material that span the gap between adjacent fingers, overlay nothing – they are not layers. Therefore, claim 1 is patentable because Dunmire does not teach or suggest removing the uncoagulated *layer* before a film skin can form.

The Examiner also suggested that the leaching bath removes “the uncoagulated foam” (now “the uncoagulated layer”). Applicants respectfully disagree.

A coagulant is applied to the outer surface of the polymeric layer to “set up” the layer, and then *after that* the forms are submerged in a leaching bath. Therefore, the entire layer of polymeric material (or at least its outer surface) has already been coagulated by the time the form reaches the leaching bath. Since all of the polymeric material would have coagulated before the leaching bath step, there would be no uncoagulated layer (previously “uncoagulated foam”) for the leaching to remove. Even if some uncoagulated foam is removed by the leaching step, which is denied, it is removed *after* a film skin has formed because that step takes place *after* the step of applying a coagulant. This is because applying a coagulant to the outer surface of a layer of foamed polymeric material, and the allowing the layer to coagulate, causes a film skin to form on

the outer surface.

Therefore, claim 1 is patentable over Dunmire because the leaching bath step does not remove the uncoagulated layer, and certainly does not remove it *before* a film skin can form.

Dunmire leads the skilled person away from coagulating a foamed polymeric layer *outwards* from the inside, because it teaches applying a first layer to a substrate and then coagulating it *inwards* from the outside, and it teaches coagulating any subsequent layers inwards from the outside (cf. column 7, lines 16 to 18 and column 8, lines 3 to 8). Applicants have invented a method in which a layer of foamed polymeric material is coagulated outwards from the inside, resulting in an uncoagulated layer over a coagulated layer, and then removing the uncoagulated layer before a film skin can form. That method is not obvious, because the prior art leads away from it, and it results in a more porous and breathable layer than was previously known.

For completeness, Applicants note that the Dunmire method could not result in a second layer of polymeric material being coagulated outwards by coagulant present on the first layer, as the Examiner suggests. The leaching bath step occurs before the second layer is applied. After the leaching bath, no more than trace amounts of coagulant would be present in or on the first layer. There simply could not be enough coagulant present in or on the first layer, if any at all, to coagulate the second layer so as to form a coagulated layer within it.

It is submitted that the Vogt et al. (U.S. Patent No. 6,475,562) and Halley et al. (U.S. Publication No. 2002/0197924) references cited in relation to certain dependent claims also do not teach or suggest these features and therefore cannot cure the deficiencies of Dunmire.

It is well settled that the Examiner “bears the initial burden of presenting a *prima facie* case of unpatentability . . .” *In re Sullivan*, 498 F.3d 1345 (Fed. Cir. 2007). To establish a *prima facie* case of obviousness, the PTO must establish at least three elements. First, the prior art reference (or references when combined) must teach or suggest all of the claim limitations: “All words in a claim must be considered in judging the patentability of the claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 165 U.S.P.Q. 494, 496 (CCPA 1970); *see also M.P.E.P.* § 2143.03. Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091 (Fed. Cir. 1986); *see also M.P.E.P.* §2143.02. Finally, the Examiner must

articulate some reason to modify or combine the cited references that renders the claim obvious. Merely establishing that the claimed elements can be found in the prior art is not sufficient to establish a *prima facie* case of obviousness.

Since the combination of the cited references fails to teach the required steps of allowing for the coagulant to coagulate some of the foam for a controlled period so that an underside of the layer of foam polymeric material coagulates to form a coagulated layer, and an outer part of the foam layer does not coagulate and forms an uncoagulated layer, and removing the uncoagulated foam layer before a film skin can form on the layer of foam to leave a cohesive, porous, and breathable coagulated layer of polymeric material on the substrate as required by claim 1, Applicants submit that a *prima facie* case of obviousness has not been established. In fact, Applicants submit that the cited reference actually teaches away from the current invention in that the coagulant is added after the substrate has been dipped in the foam.

Accordingly, claim 1 is not anticipated by or made obvious by the cited reference and favorable consideration of claim 1 is respectfully requested. Claims 4, 5, 10, 16, 18-21, 24, 25, 27, 29, 34, 35, 38, 42 and 43 depending directly or indirectly from claim 1, are submitted as patentable over the cited references for at least the same reasons.

New Claim 64

New claim 64 also contains the limitations of allowing for the coagulant to coagulate some of the foam for a controlled period so that an underside of the layer of foam polymeric material coagulates to form a coagulated layer, and an outer part of the foam layer does not coagulate and forms an uncoagulated layer, and removing the uncoagulated layer before a film skin can form on the layer of foam to leave a cohesive, porous, and breathable coagulated layer of polymeric material on the substrate as discussed above with respect to claim 1. Therefore, it is submitted that this new claim also is patentable over the cited art.

Conclusion

In view of the remarks made herein, Applicants submit that the claims presented herein are patentably distinguishable from the art applied, and prompt allowance of the application is

